**Will My Grandkids Look as Good as Me?**

**The Task**: Your job is to create a family tree of 5 generations, using punnet squares and probability to determine the traits of each generation.

**Procedure:** With a partner (can be male or female since we are not dealing with sex-linked traits) make a family tree using three different traits. The traits we are going to use are eye color, (Brown, B, is dominant to blue, b) hair color, (Dark hair, H, is dominant to light hair, h) and height (Tall, T, is dominant to short, t)

Determine the traits of your parents, and these will be used for the generation before you. If you do not know any of these traits, you can make an educated guess depending on your traits.

For the first generation you can use your grandparents traits, or figure them out using punnet squares.

By determining 2 prior generations, you should know what traits are dominant and which ones are recessing.

For your children and grandchildren you are required to have at least 2 children. Using the probability of the punnet squares, determine your childrens traits.

Each one of your children will have 2 children. One child’s spouse will be BB, Hh, tt, and the other child’s spouse will be Bb, hh, Tt.

**Requirements:**

1. A drawing of all five generations. Get creative!
2. Punnet squares for all generations.
3. A final reflection for the project assessing your knowledge and understanding of punnet squares.